On the presence in Belgium of *Chersotis cuprea* (Lepidoptera: Noctuidae)

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Abstract. Earlier records of *Chersotis cuprea* (Denis & Schiffermüller, 1775 from the Belgian fauna have always been disputed, but a correctly identified specimen is deposited in the collections of the Löbbecke Museum Aquazoo at Düsseldorf. It was caught near Baraque Michel, Hautes Fagnes (province of Liège) in July 1957, leg. Loch.

Samenvatting. Over de aanwezigheid van Chersotis cuprea (Lepidoptera: Noctuidae) in België

Vroegere meldingen van *Chersotis cuprea* (Denis & Schiffermüller, 1775) uit België bleken altijd gecontesteerd te zijn. Nochtans werd een correct gedetermineerd exemplaar aangetroffen in de collectie van het Löbbecke Museum Aquazoo te Düsseldorf. Het dier werd in juli 1957 verzameld nabij Baraque Michel in de Hoge Venen (LG) door Loch.

Résumé. Sur la présence de Chersotis cuprea (Lepicoptera: Noctuidae) en Belgique

Les mentions de *Chersotis cuprea* (Denis & Schiffermüller, 1775) pour la faune belge furent toujours contestées. Mais un exemplaire correctement identifié a été placé dans les collections du Löbbecke Museum Aquazoo à Düsseldorf. Cet exemplaire a été capturé près de la Baraque Michel dans les Hautes Fagnes (LG) en juillet 1957 par M. Loch.

Key words: Chersotis cuprea - Belgium - Faunistics - New record.

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The occurrence in Belgium of *Chersotis cuprea* (Denis & Schiffermüller, 1775) has always been disputed. This species has been mentioned for the first time from Belgium by Wesmael (1872: 227) where a single specimen was said to be caught in the dunes at the sea coast (WV) at the end of August 1841. Donckier de Donceel (1882: 39) referred to that record and precised in a footnote that it was caught at Oostende. This record was repeated by Lambillion (1903: 104–105) and by Lhomme (1923–1935: 164) without any comments. Based on this information the species was mentioned in the catalogue of De Prins (1983: 35).

Hackray & Sarlet (1976: 119) do not refer to these earlier records but they mention a second specimen from the same area: Heist-aan-Zee (WV), 20.vii.1929, leg. Mellaerts. However, they consider this record as "accidentelle" because *Chersotis cuprea* is a mountainous-alpine species whose biotope is certainly not at the Belgian littoral. They even write that the possibility of any occurrence of *Chersotis cuprea* in Belgium is impossible.

Perhaps both records originate from mislabelled specimens, accidentally introduced specimens or misidentifications, and hence the species was not entered in any further catalogues (De Prins 1998, De Prins & Steeman 2013).

However, Swoboda & Kinkler (1989: 176–177) mention a specimen caught by W. Hoch on 1st July 1957 near Baraque Michel (Hohes Venn, province of Liège). The specimen is deposited in the Aquazoo – Löbbecke Museum Düsseldorf (fig. 1). This is the only authentic Belgian specimen known thus far.

Distribution

Baraque Michel is the north-westernmost locality of the area of *C. cuprea* in Central Europe. The nearest localities are situated ca. 200 km further south-east in the German states of Hessen and Rheinland-Pfalz and even there the species is declining. Only 1 record (from a total of 8 records) after 1960 has been mentioned in Swoboda & Kinkler (1989: 176).





Fig. 1. Chersotis cuprea (Denis & Schiffermüller, 1775), $\[\]$, Belgium, Prov. of Liège, Hohes Venn, Baraque Michel, 01.vii.1957, leg. W. Hoch, coll. Aquazoo – Löbbecke Museum Düsseldorf. Photos: Dieter Schulten.

In Europe, the species has a boreo-alpine distribution, extending over Scandinavia, Finland, the Baltic States and North Russia. In Central Europe, the species is scattered over the Pyrenees, the Alps, the Central mountains of Germany (northwards till Harz), the Czech Republic, Slovakia till Bulgaria, and southwards till Central Italy and Greece. It also occurs in the mountains of Central Asia till

the coast of the Pacific Ocean (Steiner & Ebert 1998: 398).

The species does not occur in Great Britain, the Netherlands and GD Luxembourg. In France, it has mainly been observed in the South-East, but occasionally also in other departments. Very probably the species has already disappeared from Belgium.

Biology

The female deposits the eggs with its long ovipositor in the flowers of thistles and other Asteraceae, mainly during August. Species of *Carduus* and *Centaurea*, but also *Taraxacum* have been mentioned as larval host plants. The young larvae emerge during September—November and hihernate in a tube in the earth. Especially the full-grown larvae are very luminophobe and they pull old detritous leaves into their tube where they consume it. Pupation takes place under the earth

surface in a silken cocoon. The moths are mainly on the wing in August, but have been observed in Germany from early July till mid September. They are active during the night but have also been observed drinking nectar during daytime (Steiner & Ebert 1998: 400–401). The specimen from Baraque Michel is one of the earliest records ever, especially while it is a female; females usually emerge some days later than males.

The preferred biotope consists of dry, sunny meadows with a lot of flowers, mainly Asteraceae.

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References

- De Prins W. 1983. Systematische naamlijst van de Belgische Lepidoptera. Entomobrochure 4: 1-57.
- De Prins W. 1998. Catalogue of the Lepidoptera of Belgium. Studiedocumenten van het Koninklijk Belgisch Instituut voor Natuurwetenschappen 92: 1–236.
- De Prins W. & Steeman C. 2012. Catalogue of the Lepidoptera of Belgium. www.phegea.org, webh01.ua.ac.be/vve/Checklists/Lepidoptera/Noctuidae.htm [accessed 31.xii.2012].
- Donckier de Donceel Ch. 1882. Catalogue des lépidoptères de Belgique. Annales de la Société entomologique de Belgique 26: 5—161.
- Hackray J. & Sarlet L. G. 1976. Catalogue des Macrolépidoptères de Belgique. Cinquième Superfamille Noctuoidea (pars). Supplément à Lambillionea 76(3-4): 113-128.
- Lambillion L.-J. 1903. Catalogue des Lépidoptères de Belgique donnant les noms de tous les papillons pris en Belgique jusqu'à ce jour avec leurs variétés leurs synonymes, les époques d'apparition, les localités, les époques des chenilles, leur nourriture, etc., etc. et une liste de papillons paléarctiques après chaque groupe indigène. Imprimerie Douxfils, V. Delvaux, Namur, 432 p.
- Lhomme L. 1923–1935. Catalogue des Lépidoptères de France et de Belgique. Volume I. Le Carriol, par Douelle, Lot, 800 p.
- Steiner A. & Ebert G. 1998. Die Schmetterlinge Baden-Württembergs. Band 7: Nachtfalter V. Verlag Eugen Ulmer GmbH & Co., Stuttgart. 582 p.
- Swoboda G. & Kinkler H. 1989. Die Lepidopterenfauna der Rheinlande und Westfalens. Schriftenreihe der Arbeitsgemeinschaft rheinisch-westfälischer Lepidopterologen 1: 1–495.
- Wesmael C. 1872. Rapports adressés aus minsitre de l'intérieur. Annales de la Société entomologique de Belgique 15: 215–233.